증명서번호
CERTIFICATE NO.: E200910-0033-001218(5004627)
제 품 명
COMMODITY : E.R.W STEEL PIPE
제 품 규 격
SPECIFICATION : API 5LB PSL1/ASTM A53B(2007)

MILL'S QUALITY CERTIFICATES

SeAH Steel Corp.
(주)세 아 제 강

HEAD OFFICE ; BONGNAE-DONG 1GA, JUNG-GU, SEOUL, KOREA
POHANG PLANT ; 14-1, JANGHEUNG-DONG, NAM-GU, POHANG

발 급 일 자
DATE OF ISSUE : 2009.09.30
계 약 서 번 호
L/C No. (P/O No.) : 1103073882
수 요 가
CUSTOMER : PLESA
주 문 자
SHIPPER : DUFERCO SA

NO.	HEAT NO. (BATCH NO.)	관 단 TYPE *1	주 문 치 수 ORDER SIZE			수 량 QUANTITY 본 수 PCS	총 길 이 TOTAL LENGTH	중량(M/T) WEIGHT	비 고 REMARK
5	SB50150 (SHJ9161050)	BBE	10 "	X 0.500 "	X 6.120 M	65	397.800 M	32.441	CONFIRM TO NACE NORM MR0175(LAST EDITION)
6	9-3422 (SHJ9221040)	BBE	12 "	X 0.375 "	X 6.120 M	33	201.960 M	14.874	*ERW: CHEMICAL COMPOSITION, HEAT TREATMENT AND HARDNESS ONLY *DSAW:CHEMICAL COMPOSITION AND HARDNESS ONLY
7	SB51245 (SHJ9221090)	BBE	12 "	X SCH40	X 6.120 M	81	495.720 M	39.484	
8	SQ78596 (SHJ9221100)	BBE	12 "	X SCH40	X 6.120 M	110	673.200 M	53.620	

NO.	HEAT NO (BATCH NO.)	HYDROSTATIC TEST 5 Sec. psi	RESULT	N·D·T U *2	VISUAL & DIMENSION	FLATTENING	SHOCK	COMPRESSION	RESIDUAL MAGNETISM GAUSS	BENDING *3	DRIFT	CRUSH	FLARING	FLANGE	REVERSE FLATTENING	ZINC COATING TEST WEIGHT OF ZINC COAT-ING	균일성 C.S *4	알칼리 ALK *5	DESIG *6	C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	NB	TI		CEQ *8	DIR *9	TENSILE TEST (Gage Length : 50mm) TENSILE STRENGTH psi	YIELD STRENGTH psi	E.L % *10	IMPACT TEST (℃) ENE-RGY Joule	SHEAR AREA %	HARD-NESS TEST HRC	HEAT TREAT MENT SN *11
																				*7																					
기준 SPEC									30										MAX	26		120	30	30	40	100	40	15	80											22	
																			MIN																60200	35500					
5	SB50150	1990	G	G	G	G			G										H	16	1	80	13	6																	
	(SHJ9161050)																		P	15	TR	80	15	5	1	1	2	TR	1	1	1			T	69900	47570	37			9	G
																			P	16	TR	81	13	5	1	1	2	TR	1	1	2			W	75560						
6	9-3422	1260	G	G	G	G			G										H	16	18	62	15	4																	
	(SHJ9221040)																		P	15	18	62	16	6	2	1	TR	TR	1	1	1			T	68020	47130	38			9	G
																			P	15	18	63	13	5	2	1	TR	TR	1	1	2			W	75270						
7	SB51245	1360	G	G	G	G			G										H	18	2	85	9	3																	
	(SHJ9221090)																		P	17	3	84	7	2	TR	2	1	TR	TR	TR	TR			T	68890	50610	37			8	G
																			P	19	3	85	8	2	TR	2	1	TR	TR	TR	TR			W	73380						
8	SQ78596	1360	G	G	G	G			G										H	18	1	81	12	3																	
	(SHJ9221100)																		P	17	2	81	13	4	1	1	2	TR	1	TR	TR			T	74400	50320	35			10	G
																			P	18	2	82	10	4	1	1	2	TR	1	TR	2			W	80200						

NOTE *1 ~ *11: Refer To Others

OTHERS
*1-BBE:Black Beveled End(30°)
*2-U:Ultrasonic Test
*6-H:Heat(Ladle) Analysis, P:Product Analysis *7-2:X100, 3:X1000
*9-T:Base Metal Transverse, W:Weld Part Transverse *10-E.L:Elongation *11-S.N:Seam Normalizing *G:GOOD *Tr:Trace

Surveyor :

· WE HEREBY CERTIFY THAT THE MATERIAL HEREIN HAS BEEN MADE AND TESTED IN ACCORDANCE WITH ABOVE SPECIFICATION AND THE RESULTS OF ALL TEST ARE ACCEPTABLE.
· THE USE OF THE MATERIAL OUTSIDE THE SPECIFICATIONS INDICATED ON THIS CERTIFICATE MAY CAUSE SAFETY AND/OR MONETARY PROBLEMS. FURTHERMORE, ANY ORGANIZATION OR PERSON(S) WHO DELIBERATELY MODIFIES THE CERTIFICATE WILL BE PROSECUTED FOR FORGING AN OFFICIAL DOCUMENT (ACCORDING TO THE PROVISIONS OF THE CRIMINAL CODE 231)

Manager of Q.M Dept.
N. J. Baek